

Patent Claims

1. A vehicle seat (30) having at least one ventilator (1), at least one usable surface (71) and at least one air supply opening (2, 4), characterized in that the ventilator (1) is provided to produce a directed airflow in an air duct (5) which is situated between the usable surface (71) and the air supply opening (2, 4) and divides into at least two air duct arms, the ventilator (1) being arranged on the side of the vehicle seat (30) when the vehicle seat (30) is oriented in the direction of travel of the vehicle.
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- 15 2. The vehicle seat (30) as claimed in claim 1, characterized in that the direction of the airflow is provided either from the air supply opening (2, 4) to the usable surface (71) or from the usable surface (71) to the air supply opening (2, 4).
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- 25 3. The vehicle seat (30) as claimed in one of the preceding claims, characterized in that the vehicle seat (30) has a backrest (31) with a backrest structure (3) and/or a backrest upholstery, the ventilator (1) being arranged at the side of the backrest structure and/or at the side of the backrest upholstery.
- 30 4. The vehicle seat (30) as claimed in one of the preceding claims, characterized in that the vehicle seat (30) has a seat part (32) with a seat part structure and/or a seat part upholstery, the ventilator (1) being arranged at the side of the seat part structure and/or at the side of the seat part upholstery.
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5. A vehicle seat (30) having at least one usable surface (71) and at least one air supply opening

5 (2, 4), the usable surface (71) being connected to the air supply opening (2, 4) via at least one air duct (5), with a directed airflow being provided in the air duct (5), characterized in that a reduction in the cross section of the air duct (5) is provided in a direction starting from the air supply opening (2, 4) to the usable surface (71).

10 6. The vehicle seat (30) as claimed in claim 5, characterized in that the air duct (5) is branched in the direction starting from the air supply opening (2, 4) to the usable surface (71) in such a manner that the air duct (5) is distributed over the entire usable surface (71).

15 7. The vehicle seat (30) as claimed in either of claims 5 and 6, characterized in that at least in a subregion of the air duct (5) the cross section is essentially rectangular and has a constant width, and in that the reduction in the cross section of the air duct (5) is provided by means of a reduction in the height of the air duct (5) in the subregion.

25 8. The vehicle seat (30) as claimed in one of claims 5, 6 or 7, characterized in that at least in a subregion of the air duct (5), in the direction starting from the air supply opening (2, 4) to the usable surface (71), the counterpressure in the air duct (5) is continuously increased.

30 9. The vehicle seat (30) as claimed in one of claims 5, 6, 7 or 8, characterized in that compensation elements (13) are provided on the side of the air duct (5) lying opposite the usable surface (71) in such a manner that a reduction in the cross section of the air duct (5) is opposed when the usable surface (71) is loaded.

10. The vehicle seat (30) as claimed in one of the preceding claims, characterized in that the airflow is provided for cooling the usable surface (71).
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11. The vehicle seat (30) as claimed in one of the preceding claims, characterized in that the strength of the heat transfer capacity (430) of the airflow is provided as a function of whether a measured actual temperature of the vehicle in the vehicle interior is above a predetermined desired temperature of the vehicle.
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- 15 12. The vehicle seat (30) as claimed in claim 11, characterized in that the strength of the airflow (420) is provided as a measure of the strength of the heat transfer capacity (430) of the airflow.
- 20 13. A method for controlling the strength of the heat transfer capacity (430) of an airflow in an air duct (5) of a vehicle seat (30), which is used in a vehicle, characterized in that the heat transfer capacity (430) of the airflow is provided as a function of whether a measured actual temperature of the vehicle in the interior of the vehicle is above a predetermined desired temperature of the vehicle.
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- 30 14. The method as claimed in claim 13, characterized in that the strength of the airflow is used as a measure of the strength of the heat transfer capacity (430) of the airflow.
- 35 15. The method as claimed in claim 13 or 14, characterized in that a first strength of the airflow (422) and a second strength of the airflow (423) are provided, the first strength of the

airflow (422) being greater than the second strength of the airflow (423), the second strength of the airflow (423) being set in the event of the actual temperature of the vehicle slightly exceeding the desired temperature of the vehicle or in the event of it not exceeding it, and the first strength of the airflow (422) being set only in the event of the actual temperature of the vehicle significantly exceeding the desired temperature of the vehicle.